

#### DECLARATION FOR PATENT APPLICATION, POWER OF TORNEY & DESIGNATION OF CORRESPONDENCE ADDRESS

As below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

### Endplate Detection in Digital Radiograph by Dynamic Programming Using Both Local and Global Constraints

the specific	cation of which (check one)
	attached hereto, and as filed on 12.10.2001 as Application Serial No. 10/016,096.
	the chave identif

I hereby state that I have reviewed and understand the contents of the above-identified specification including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with 37 CFR §1.56(a).

# PRIOR FOREIGN/PCT APPLICATION(S) FILED WITHIN 12 MONTHS (6 MONTHS FOR DESIGN) PRIOR TO THIS APPLICATION AND ANY PRIORITY CLAIMS UNDER 35 U.S.C. § 119(a)-(d)

I hereby claim foreign priority benefits under 35 USC §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

11 - 11 - 11 - 11	Priority	Claimed
Prior Foreign Application(s)  Country Filing Date	Yes	No
Number Country Filing Date		
		<del></del>

#### CLAIM FOR BENEFIT OF PRIOR U.S. PROVISIONAL APPLICATION(S) (35 U.S.C. § 119(e))

I hereby claim the benefit under Title 35, United States Code, § 119(e) of any United States provisional application(s) listed below:

P. P. 1.	
Provisional Application Number	Filing Date
	10.01.2001
60/326,358	

#### CLAIM FOR BENEFIT OF EARLIER US/PCT APPLICATION(S) UNDER 35 U.S.C. 120

I hereby claim the benefits under 35 USC §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of 35 USC §112, I acknowledge the duty to disclose material information as defined in 37 CFR §1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

9		N. Ahandanad
Anni No	Filing Date	Patented, Pending, Abandoned
Appl. No.	1 mig Date	
	<u> </u>	

**Power of Attorney**: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. (list name and registration number)

Adel A. Ahmed, Reg. No. 29,606; I. Marc Asperas, Reg. No. 37,274; Stanton C. Braden, Reg. No. 32,556; Terrence M. Brennan, Reg. No. 42,360; Alexander J. Burke, Reg. No. 40,425; David D. Chung, Reg. No. 38,409; Dexter K. Chin, Reg. No. 38,842; Joseph S. Codispoti, Reg. No. 31,819; Henry J. Groth, Reg. No. 39,696; Tracy Lynn Hurt, Reg. No. 34,188; Mark H. Jay, No. 27,507; Brian K. Johnson, Reg. No. 46,808; Stuart P. Kaler, Reg. No. 35,913; Bosco Reg. No. 41,896; Rosa S. Kim, Reg. No. 39,728; Peter A. Luccarelli, Jr., Reg. No. B. Kim, Reg. No. 41,896; Rosa S. Kim, Reg. No. 39,728; Peter A. Luccarelli, Jr., Reg. No. 29,750; James M. Markarian, Reg. No. 31,277; Jeffrey P. Morris, Reg. No. 25,307; Pasquale 29,750; James M. Markarian, Reg. No. 31,277; Jeffrey P. Morris, Reg. No. 25,307; Pasquale 29,750; James M. Markarian, Reg. No. 31,277; Jeffrey P. Morris, Reg. No. 25,307; Pasquale 29,750; James M. Markarian, Reg. No. 33,753; Rashmi Raj, Reg. No. P-50,500; Benjamin M. 42,944; Donald B. Paschburg, Reg. No. 33,753; Rashmi Raj, Reg. No. P-50,500; Benjamin M. 42,944; Donald B. Paschburg, Reg. No. 33,753; Rashmi Raj, Reg. No. P-50,500; Benjamin M. 42,944; Donald B. Paschburg, Reg. No. 35,363; Daniel J. Staudt, Reg. No. 34,733; Rubin, Reg. No. 44,310; Laura M. Slenzak, Reg. No. 35,363; Daniel J. Staudt, Reg. No. 34,733; Rubin, Reg. No. 44,486

#### Send Correspondence to:

Elsa Keller Intellectual Property Department Siemens Corporation 186 Wood Avenue South Iselin, New Jersey 08830 Tel. No. (732) 321-3026

I hereby declare that all statements made herein on my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both under 18 USC §1001 and that such willful made are punishable by fine or imprisonment, or both under 18 USC §1001 and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

false statements may jour
Full Name of First inventor:  Guo-Qing Wei  Date: 4/5/02
Inventor's Signature
Residence: Plainsboro, NJ
Citizenship: P.R. of China
Citizenship. F.R. of Crime Post Office Address: 94 Elsie Drive, Plainsboro, NJ 08536
Full Name of Second Inventor:
Jianzhong Qian  Date: 4/5/2007
Inventor's Signature
Residence: Princeton, NJ
Citizenship: LISA
Post Office Address: 3 Oxford Ct., Princeton, No sec-
Full Name of Third Inventor:
Helmuth Schramm Date:
Inventor's Signature
Residence: Neunkirchen, Germany
Citizenship: Germany
Citizenship: Germany Post Office Address: Muldenweg 8, Neunkirchen 91077, Germany



#### DECLARATION FOR PATENT APPLICATION, POWER OF ATTORNEY & DESIGNATION OF CORRESPONDENCE ADDRESS

As below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

## Endplate Detection in Digital Radiograph by Dynamic Programming Using Both Local and Global Constraints

·	and Global Collections
the sp	ecification of which (check one)
	is attached hereto, and
<u>X</u>	was filed on 12.10.2001 as Application Serial No. 10/016,096.
	the contents of the above-identif

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		V/a)	Priority (	Claimed
	Prior Foreign Appli	Filing Date	Yes	No
Number	Country	Timing Date		

### CLAIM FOR BENEFIT OF PRIOR U.S. PROVISIONAL APPLICATION(S) (35 U.S.C. § 119(e))

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provisional application(o)	
Provisional Application Number	Filing Date
	10.01.2001
60/326,358	
`	

#### CLAIM FOR BENEFIT OF EARLIER US/PCT APPLICATION(S) UNDER 35 U.S.C. 120

I hereby claim the benefits under 35 USC §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of 35 USC §112, I acknowledge the duty to disclose material information as defined in 37 CFR §1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

filling date of the si		
Appl. No.	Filing Date	Patented, Pending, Abandoned

<u>Power of Attorney</u>: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. (list name and registration number)

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#### Send Correspondence to:

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Full Name of First inventor:
Guo-Qing Wei Date:
Inventor's Signature
Residence: Plainsboro, NJ
Citizenship: P.R. of China
Post Office Address: 94 Elsie Drive, Plainsboro, NJ 08536
Full Name of Second Inventor:
Jianzhong Qian  Date:
Inventor's Signature
Residence: Princeton, NJ
Citizenship: USA
Post Office Address: 3 Oxford Ct., Princeton, NJ 08550
Full Name of Third Inventor:
Helmuth Schramm  Melly Helmuth Schramm  Date: 04-03-2002
Inventor's Signature / 14 days
Residence: Neunkirchen, Germany
Citizenship: Germany
Post Office Address: Muldenweg 8, Neunkirchen 91077, Germany





# 01-PIE2 63 USOT

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JUNE 27, 2002

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Under Secretary Commence For Intellectual Property and Director of the Commence States Patent and Trademark Office Washington, DC 20231 www.uspto.gov

SIEMENS CORPORATION ELSA KELLER 186 WOOD AVENUE SOUTH INTELLECTUAL PROPERTY DEPARTMENT ISELIN, NJ 08830

> UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 04/18/2002

REEL/FRAME: 012832/0571

NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

QIAN, JIANZHONG

DOC DATE: 04/05/2002

ASSIGNOR:

WEI, GUO-QING

DOC DATE: 04/05/2002

**ASSIGNEE:** 

SIEMENS CORPORATE RESEARCH, INC. 755 COLLEGE ROAD EAST PRINCETON, NEW JERSEY 08540

SERIAL NUMBER: 10016096

PATENT NUMBER:

FILING DATE: 01/21/2000

ISSUE DATE:

TONYA LEE, EXAMINER ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS

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RM PTO-1595 vv. 6-93) IB No. 0651-0011 (exp.	APR 1 8 2002 8 P
To the Hon	orable Commissioner of Patent

04-30-2002



EET U.S. DEPARTMENT OF COMMERCE

Patent and Trademark Office

APR 1 8 2002 & P.	Atty Dkt No.: 2001P18253US01
v. 6-93) B No. 0651-0011 (exp. 434)	: Please record the attached original documents or copy thereof.
	Name and address of receiving party(ies)
Name of conveying party(ies):	Name: Siemens Corporate Research, Inc.
nzhong Qian Io-Qing Wei $4.18.02$	Internal Address:
ditional name(s) of conveying party(ies) attached?Yes _X_No	
	Street Address: 755 College Road East
Nature of conveyance:	
X Assignment Merger  Security Agreement Change of Name	City: Princeton State: NJ ZIP: 08540
Security Agreement Change of Name Other	Additional name(s) & address(es) attached?Yes _X_No
xecution Date: April 5, 2002	
<ul> <li>Application number(s) or patent number(s):</li> <li>If this document is being filed together with a new application,</li> </ul>	the execution date of the application is:  B. Patent No.(s)
A. Patent Application No.(s)	5. 1 4.4.4.4
10/016,096	V. No.
Additional numbers	attached?Yes _X_No
n an correspondence	6. Total number of applications and patents involved: 1
<ol><li>Name and address of party to whom correspondence concerning document should be mailed:</li></ol>	7. Total Fee (37 CFR 3.41)
Name: Elsa Keller	Enclosed
Internal Address:	X Authorized to be charged to deposit account
Siemens Corporation	
Intellectual Property Department	8. Deposit Account No.
Street Address: 186 Wood Avenue South	19-2179
City: <u>Iselin</u> State: <u>NJ</u> ZIP: <u>08830</u>	
	T USE THIS SPACE
Statement and signature     To the best of my knowledge and belief, the foregoing inform copy of the original document.	nation is true and correct and any attached copy is a true
Donald B. Paschburg, Reg. No. 33,753  Name of Person Signing  Signature	B. Rusellurg April 11, 2002 Date
Total number of pages including cover sheet, attachment	s, and document: 3
24/20/2002 GTDN11 00000018 192179 10016096	

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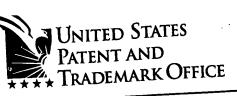
01 FC:581

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Docker No.: 2001P18253 US01 Page 2

Covenant with said Assignee, its successors, assigns and legal representatives that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

	Jianzhong Qian
State of New Jersey ) : ss  County of Middle Sex)  Before me this 5th day of April me personally known to be the person who is and acknowledged to me that he executed the forth.	, 2002 personally appeared Jianzhong Qian to s described in and who executed the above instrument, he same of his own free will for the purpose therein set
[Seal]	Notary Public  LAURIE ZIMMER  NOTARY PUBLIC OF NEW JERSEY  My Commission Expires June 1, 2005  Guo-Qing Wei
State of New Jepsey ): ss  County of Middle Sex  Before me this 5 1/h day of April me personally known to be the person who and acknowledged to me that he executed	, 2002 personally appeared Guo-Qing Wei to is described in and who executed the above instrument, I the same of his own free will for the purpose therein set
forth. [Seal]	Notary Public  LAURIE ZIMMER  NOTARY PUBLIC OF NEW JERSEY  My Commission Expires June 1, 2005



SIEMENS CORPORATION

186 WOOD AVENUE SOUTH



JUNE 27, 2002

ELSA KELLER

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INTELLECTUAL PROPERTY DEPARTMENT

JUL 0 2 2002

Chief Information Officer Washington, DC 20231 www.uspto.gov



INTELLECTUAL PROPERTY DEPARTMENT ISELIN, NJ 08830 UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

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RECORDATION DATE: 04/18/2002

REEL/FRAME: 012832/0786

NUMBER OF PAGES: 3

ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS). BRIEF:

ASSIGNOR:

SCHRAMM, HELMUTH

DOC DATE: 04/03/2002

ASSIGNEE:

SIEMENS AKTIENGESELLSCHAFT BERLIN AND MUNICH, FED REP GERMANY

SERIAL NUMBER: 10016096

FILING DATE: 01/21/2000

ISSUE DATE:

PATENT NUMBER:

SAUNDRA BALLENGER, EXAMINER ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS

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To the H	onorable	Commiss	ioner of Paten

04-30-2002



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#### ET U.S. DEPARTMENT OF COMMERCE

Patent and Trademark Office Atty Dkt No.: 2001P18253US01

w. 6-93)	Atty Dkt No.: 2001F182535001
To the Honorable Commissioner of Patents and Trademarks.	072685 riginal documents or copy thereof.
	2. Name and address of receiving party(ies)
Name of conveying party(ies):	Name: Siemens Aktiengesel Ischaft
elmuth Schramm	Internal Address:
ditional name(s) of conveying party(ies) attached? Yes _X_ No	micinary desires
*	
11 , 12 , 11 ,	Street Address:
4.18.02	
·	City: <u>Berlin and Munich</u> State: ZIP: ZIP: Fed. Republic of Germany
•	
. Nature of conveyance:	Additional name(s) & address(es) attached? X Yes No
Morgor	
X Assignment — Olympia of Nome	
Geodiny rights	
Other	
Execution Date: April 3, 2002	
A. Patent Application No.(s)  10/016,096  Additional numbers a	B. Patent No.(s)
7,000	6. Total number of applications and patents involved: 1
5. Name and address of party to whom correspondence	6. Total number of applications and paterns invested —
concerning document stroug be manda	7. Total Fee (37 CFR 3.41) \$ 40.00
Name: Elsa Keller	Enclosed
Internal Address:	X Authorized to be charged to deposit account
Siemens Corporation	
Intellectual Property Department	8. Deposit Account No.
Street Address: 186 Wood Avenue South	19-2179
City: Iselin State: NJ ZIP: 08830	
4/30/2002 GTDN11 00000017 192179 10016096 DO NOT	USE THIS SPACE
1 FC:581 40.00 CH	
9. Statement and signature To the best of my knowledge and belief, the foregoing informations of the original document.  One of the control	April 11, 2002  Date
Name of Person Signing Signature	,
Total number of pages including cover sheet, attachments,	, and document:

# IDNR: 7068 / V: 01.05.16 / B: ROW

#### **ASSIGNMENT**

For good and valuable consideration, I, Helmuth Schramm, residing at Muldenweg 8, Neunkirchen 91077, citizen of Germany; hereafter individually or collectively referred to as "Assignor";

Hereby sell, assign, and transfer to Siemens Aktiengesellschaft, a Corporation, organized and existing under the German law, having its principal place of business at Wittelsbacherplatz 2, 80333 Munich, Germany,

on 12.10.2001,

U.S. Serial No.: 10/016,096,

entitled:

المدينة مرسمة

Endplate Detection in Digital Radiograph by Dynamic Programming Using Both Local and Global Constraints

and in and to said application and all divisional, continuing, substitute, renewal, reissue, and all other applications for Letters Patent which have been or shall be filed in the United States and all foreign countries on any of said improvements; and in and to all original and reissued patents which have been or shall be filed in the United States and all foreign countries on said improvements;

Agree that said Assignee may apply for and receive Letters Patent for said improvements in its own name; and that, when requested, without charge to but at the expense of said Assignee, its successors, assigns and legal representatives, to carry out in good faith the intent and purpose of this assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all said improvements; execute all rightful oaths, assignments, powers of attorney and other papers; communicate to said Assignee, its successors, assigns, and legal representatives, all facts known to the undersigned relating to said improvements and the history thereof; and generally do everything possible which said Assignee, its successors, assigns or legal representatives shall consider desirable for aiding in securing and maintaining proper patent protection for said improvements and for vesting title to said improvements and all applications for patents and all patents on said improvements, in said Assignee, its successors, assigns and legal representatives; and

Covenant with said Assignee, its successors, assigns and legal representatives that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

Docket No.: 2001P18253 US01 Page 2

Witness

04-03-2002 Date

<u>04-03-2002</u> Date